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Global implications of the year 2000 date conversion problem of computers

Steps taken within the United Nations system and with Member States to resolve the year 2000 date conversion of computers

Report of the Secretary-General

Summary

This report responds to the request of the General Assembly in its resolution 53/86 of 7 December 1998 that the Secretary-General report to it at its fifty-fourth session on the steps taken within the United Nations system and with Member States to resolve the year 2000 date conversion problem of computers. The report presents information on this subject from the United Nations Secretariat, the Funds and Programmes, and the specialized agencies. It also sums up the steps taken by the Secretary-General with Member States to facilitate resolution of this problem. The report updates and complements an earlier report of the Secretary-General (A/C.5/54/3) responding to the request of the Advisory Committee on Administrative and Budgetary Questions (see A/53/513, para. 16) that the United Nations Secretariat coordinate the preparation of a report by the United Nations Administration and all the administrations of the funds and programmes mentioned in paragraph 1 of the above-mentioned report on the progress made with respect to the year 2000 compliance issue.

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I. Introduction

1. In paragraph 5 of its resolution 53/86 of 7 December 1998, the General Assembly requested the Secretary-General to take steps to ensure that all parts of the United Nations system take measures to ensure that their computers and equipment with embedded microprocessors are year 2000 compliant well before the target date by drawing up a plan of action for the United Nations system. In paragraph 7 of that resolution, the General Assembly requested the Secretary-General to ensure that the United Nations system closely monitors actual and potential sources of funding to support efforts of the developing countries and countries in transition to address the year 2000 problem and to facilitate the dissemination of relevant information on those funding possibilities to the Member States. Finally, in paragraph 8, the General Assembly also requested the Secretary-General to report to the General Assembly at its fifty-fourth session on the steps taken within the United Nations system and with Member States to resolve this problem. In paragraph 16 of its report on financial reports and audited financial statements, and reports of the Board of Auditors (A/53/513), the Advisory Committee on Administrative and Budgetary Questions requested the United Nations Administration and all the administrations of the funds and programmes mentioned in paragraph 1 of the above-mentioned report[1] to report to it by May 1999 on the progress made with respect to the year 2000 compliance issue. The Advisory Committee further requested the United Nations Secretariat to coordinate the preparation of the report.

2. The present report has been prepared accordingly. Information is provided on measures taken or to be taken to implement the requests and recommendations of the General Assembly, including a timetable where appropriate. The report complements and updates an earlier report of the Secretary-General responding to the request of the Advisory Committee (A/C.5/54/3).

II. Action taken by the United Nations and the Funds and Programmes

United Nations

3. The following management structure was set up to oversee the Organization's efforts to manage the year 2000 issue:

(a) A year 2000 management group, composed of senior managers (under-secretaries-general or assistant secretaries-general) and chaired by the Under-Secretary-General for Management, was established in February 1999 to provide the Secretariat with policy guidance and oversight, with the participation of selected Funds and Programmes. Priority is given to mission-critical operations of the Organization to ensure that they will continue to be operational after 1 January 2000, irrespective of outside constraints;

(b) The Year 2000 Management Group is supported by a year 2000 team, an interdepartmental task force coordinating year 2000 issues in the areas of information technology, peacekeeping operations, humanitarian affairs, economic and social affairs, development cooperation, security and safety, facility management and legal, financial and administrative issues. The team identifies mission-critical operations for the Organization as a whole, coordinates the development of contingency plans for those mission-critical operations where there is a risk of failure and encourages sharing of efforts, exchange of materials and the review of current and best practices with organizations of the United Nations system.

4. It is programme managers, not the year 2000 team, who continue to have the responsibility for the planning and effort necessary to ensure that their operations will not be compromised by or otherwise can adequately respond to problems associated with the year 2000 problem. Additionally, neither the year 2000 management group nor the team are responsible for supporting the efforts of Member States to address the potential impact of the year 2000 problem on them.

5. The United Nations engaged the services of a specialized consultant to conduct a year 2000 risk assessment study for its telecommunications and computing infrastructure as well as business applications at United Nations Headquarters. During the first phase of the year 2000 risk assessment study (completed in March 1999), the consultant was required to establish an inventory of business applications and telecommunications and computing components subject to year 2000 risk. A total of 152 business applications were inventoried during the risk assessment study. In the second phase of the exercise, completed on 30 June 1999, the consultant used specialized software tools to further examine 62 of these critical applications for potential year 2000 problems and issued a risk assessment report with recommended remedial actions and resources estimates. The status of these 62 critical business applications is as follows:

Status of applications	*July 1999*	*September 1999*
Year 2000 compliant	38 (62 per cent)	47 (76 per cent)
Needing correction	22 (36 per cent)	13 (21 per cent)
Other	2[a] (3 per cent)	2[b] (3 per cent)

[a] Applications could not be fixed.
[b] Applications were retired.

6. There are no critical applications for which the remedial process did not start. The remedial process for the 13 applications still being corrected will be completed by November 1999. The year 2000 compliance status of United Nations Headquarters is being monitored by the year 2000 team. For that purpose, in early June 1999, programme managers were provided with a format of the status report that they have been requested to forward monthly to the year 2000 team as of 1 August 1999.

7. With respect to embedded systems/microprocessors, a letter was sent in February 1999 to all business partners and service and infrastructure providers requesting certificates of compliance for all equipment, systems and services and requesting assurance that, in case they were not year 2000-compliant, that the supplier/service providers were taking the necessary actions to achieve year 2000 conformity and had a contingency plan to resolve any problem. As of the date of the present report, all the Organization's business partners have responded. A half-day seminar was organized with our major vendors on 25 May 1999. At that seminar, the power and steam supplier gave formal assurances that they had been fully year 2000-compliant since 31 December 1998 and had carried out tests that showed that there would not be year 2000-induced power outages. The same applied to the steam supply, which would be compliant by mid-1999. With respect to elevators, the vendor informed the Organization that their functioning was not date-dependent but that nonetheless they had been satisfactorily tested; moreover, an employee of the company will be on-site in case of any malfunction. The Facilities Management Division has completed an assessment study of all embedded building equipment and systems, floor by floor, building by building. Detailed contingency plans were finalized at the end of May 1999. Testing took place from 15 June to 31 July 1999. Required staff were advised to avoid, to the extent possible, scheduling vacations between 20 December 1999 and 7 January 2000.

8. The new year 2000-compliant version of the Integrated Management Information System (IMIS) (3.4.3) was tested in June and was introduced in July 1999.

9. An information circular on potential problems associated with the transition to the year 2000 (ST/IC/1999/34) was issued on 29 April 1999. The circular was also posted on the Intranet at all duty stations as well as on the Administrative Committee on Coordination (ACC) discussion site on year 2000 issues for easy access by organizations of the United Nations system.

10. The year 2000 team is coordinating the development of contingency plans for each of the principal mission-critical operations where there is a risk of failure. The team has prepared a template for such contingency plans which was circulated to departments and to Offices away from Headquarters on 30 June 1999. To facilitate the development of contingency plans for the mission-critical operations of the Organization, three scenarios were considered: scenario 1-full disruption (acute crisis); scenario 2-partial disruption (progressive crisis); and scenario 3-minimum disruption. Contingency plans have been completed and tested in the "support" departments and are currently being completed by the "programme" departments. The target date for the completion of the plans was set at 15 October 1999. Lead offices have been designated within the Secretariat to determine minimum requirements for each of the mission-critical activities of the Organization, should there be power, other utility or telecommunications failures. Two task forces (one on telecommunications and the other on responses to year 2000-induced problems that may arise in the field) have been set up.

11. Offices away from Headquarters were contacted and guidance provided on matters such as the year 2000 management structure to be put in place, identification of mission-critical activities and the establishment of a work programme. A network of year 2000 focal points was activated and information provided to them, including: a year 2000 strategy for Offices away from Headquarters; a background note on the management structure at Headquarters; guidelines developed by the Inter-Agency Procurement Services Office (IAPSO) to ensure that all information technology components procured by the United Nations are year 2000-compliant and three model letters to utilities providers, vendors and landlords requesting information on compliance. Field visits were carried out to several duty stations (Addis Ababa, Arusha, Bangkok, Beirut, Geneva, Nairobi, Vienna and Santiago). At this stage, progress regarding the remaining remedial actions is being monitored and contingency plans are being refined. Furthermore, Offices away from Headquarters have identified minimum requirements for operational readiness and are in the process of determining the critical resources

required to maintain those functions. This process will be completed by end of October 1999.

12. With respect to inter-agency cooperation, in November 1998 the Secretary-General drew the attention of all members of ACC to relevant parts of General Assembly resolution 52/233 of 26 June 1998 on the global implications of the year 2000 date conversion problem of computers and suggested that the year 2000 issue be placed on the agenda of the next high-level meeting of the Consultative Committee on Administrative Questions (CCAQ). At that meeting, which took place in New York on 12 March 1999, the state of preparedness of members of the United Nations system was reviewed and it was agreed that system-wide coordinated approaches were needed, location by location, to deal with:

(a) Contingency planning (including crisis management);

(b) Logistics (particularly for field-oriented organizations);

(c) Financial matters (payroll and banking matters);

(d) Personnel matters (including issues related to security and safety);

(e) Telecommunications.

13. Lead agencies were identified to carry out these actions and an informal network of senior managers was created through CCAQ to share efforts, exchange materials and review current and best practices. At its spring session, in April 1999, the ACC adopted a statement by the executive heads of the United Nations system on year 2000 prepared by the high-level meeting of CCAQ. Furthermore, following consultations among its members, the CCAQ (Finance and Budget) recommended a common approach for the timing of payment of the December 1999 and January 2000 salaries at each duty station. This was agreed to by the high-level CCAQ on 24 September 1999. An information circular to inform United Nations staff of that decision was issued on 27 September 1999 (ST/IC/1999/80).

14. In order to address the security issues which might arise as a result of year 2000-related problems, the Office of the United Nations Security Coordinator requested the designated official and security management teams at all duty stations where United Nations staff were present to conduct a risk assessment and impact analysis, indicating what areas they believed could be affected. Information was requested regarding electrical power, communications, transportation, oil and gas, water supply, financial services, payment systems, life safety, possibility of insecurity and impact on humanitarian assistance. The Office of the United Nations Security Coordinator will review the risk assessment and impact analysis for each duty station and make specific recommendations regarding what steps can be taken to mitigate the security impact on United Nations personnel.

15. Duty stations were also requested to develop contingency plans to deal with any eventuality. Designated officials have been requested, *inter alia*, to update their security plans:

(a) To take into account year 2000 scenarios;

(b) To update their lists of staff and dependants at the duty station;

(c) To establish a small crisis management team to deal with security matters;

(d) To develop alternative means of communications;

(e) To ensure that staff members have been briefed regarding precautions to be taken to prepare for possible year 2000-related difficulties.

16. Contingency plans for each duty station were received in early October 1999. In addition, in March and September 1999, travel advisories were issued to all staff regarding problems which they might encounter should they choose to travel over this period.

International Trade Centre UNCTAD/WTO

17. A detailed inventory of all computer hardware, software and applications has been carried out. Surveys have been undertaken for all ITC databases, including new hardware platforms and software to be installed. The year 2000 compliance status of each item of hardware and software has been determined and remedies and test methods have been defined. Actions to be undertaken have been prioritized. As a result of these actions, the ITC technical infrastructure has been either upgraded or completed with a series of hardware and software items which are all year 2000-compliant. Furthermore, mainframe applications are being migrated to Windows NT platforms. A "master disk image" is being created on a local area network (LAN) server for each type of personal computer being installed at ITC. This "image" incorporates all software upgrades to the year 2000-compliant status.

18. In September 1999, it is planned that the "master disk image" will be replicated on every personal computer. The migration of mainframe applications is expected to continue

until the end of the year, with remaining applications being migrated to the new International Computing Centre (ICC) mainframe, which is year 2000-compliant.

United Nations University

19. The United Nations University has made an assessment of the year 2000 problem in consultation with its research and training centres and programmes located in different parts of the world. The assessment has convinced the University that it will be minimally affected by the year 2000 problem.

20. The University has analysed its information systems and identified which items had to be converted or replaced in order to be year 2000-compliant. Conversion of platforms and interfaces were to be completed before September 1999. With regard to other systems, such as telecommunications systems and building infrastructure, adjustments had already been made to the building management and security control system of the University's headquarters in January 1999, with remaining adjustments programmed to be carried out before September 1999.

United Nations Development Programme

21. Following the decision of the Executive Committee of the United Nations Development Programme (UNDP), a year 2000 task force under the coordination of the Operations Support Group has been set up at headquarters to: (a) protect UNDP funds; (b) promote UNDP-wide contingency planning; (c) monitor the state of preparedness at headquarters and country offices; and (d) facilitate internal and inter-agency coordination. The task force reports on the year 2000 status of country offices and headquarters on a regular basis to the UNDP Executive Committee. UNDP is actively contributing to the management of the year 2000 challenge through the United Nations Development Group Office (UNDGO) and the resident coordinator system. A comprehensive Web site has been created to inform the country offices on year 2000-related matters. (This information, together with some diagnostic tools, has also been distributed to all country offices on CD-ROMs.) In addition, a UNDP year 2000 help desk has been in operation since April 1999. Year 2000 focal points have been designated in country offices and, at the end of June 1999, the Associate Administrator sent a comprehensive letter to all UNDP resident representatives, raising their awareness of the year 2000 problem and underscoring the need for timely submission of country office contingency plans.

22. Firm arrangements have also been made for UNDP participation and coordination with CCAQ committees, the Office of the United Nations Security Coordinator, the Economic and Social Council Working Group on Informatics, the United Nations Office for Project Services (UNOPS), the United Nations Population Fund and inter-agency discussion groups on the year 2000 problem.

23. Risk assessment for computer hardware and software has been completed for 80 country offices and headquarters. An average of $20,000 was, or will be, assigned to each of the remaining offices to make their technology systems year 2000-compliant. UNDP corporate software packages, such as finance accounting, have been rewritten and tested for year 2000 compliance, and IMIS is awaiting United Nations year 2000 certification.[2] It was planned that, by the end of September 1999, all UNDP country offices would be at a stage where the year 2000 problem would not have any serious impact on their internal operations.

24. Risk assessment for the banking systems at the country office level has been completed for 59 countries, and responses from other countries are awaited. Risk assessment of external factors is being looked at in conjunction with the Office of the United Nations Security Coordinator. This will be an ongoing process until December and will be addressed in the context of contingency planning against possible failures in each sector.

25. It was planned for an event management centre to be established at UNDP headquarters in October 1999 to meet an expected increase in queries from country offices on mitigation measures.

26. UNDP country offices are responding to the requests from the Office of the United Nations Security Coordinator for contingency planning. An analysis of the magnitude of risks for each country office will be made in collaboration with the Office of the United Nations Security Coordinator and the United Nations agencies concerned.

27. In consultation with the regional bureaux, a list of the most mission-critical functions that must be maintained at the country-office level to sustain UNDP operations is being compiled. The responsibilities for different mitigating measures, such as front load procurement for critical projects, advance purchase of office supplies, increased level of advances to cover unusual expenditures, identification of projects to be placed on hold, and management of personnel leave plans have been entrusted to line departments/offices concerned.

United Nations Children's Fund

28. The activities of the United Nations Children's Fund (UNICEF) related to year 2000 preparedness may be summed up as follows:

(a) Identification, documentation and circulation of all appropriate firmware and operating systems-related upgrades or fixes for all computer equipment utilized by UNICEF offices worldwide;

(b) Identification, documentation and circulation of all appropriate software patches or fixes for all standard office applications utilized by UNICEF offices worldwide;

(c) Implementation of a plan for replacing non-compliant corporate systems with compliant systems;

(d) Publication of continuing updates on the status of year 2000 compliance and certification by the vendors of information technology products and services which UNICEF uses;

(e) Preparation of a "live test" plan involving three headquarters locations, regional offices and a selected number of field offices covering data interfaces among applications to be executed from 29 July to 2 August 1999 in order to verify compliance at all levels;

(f) UNICEF has engaged the various institutions (such as banks, service providers and suppliers) with whom it does business in an awareness process with a view to identifying the potential risks and developing some form of contingency plan;

(g) Instructions to field offices regarding working with the United Nations resident coordinator system to assess the in-country risks for business continuity and staff security, and to take action as appropriate, are currently being finalized;

(h) Consultations are ongoing with UNDP regarding cash planning and management in field offices. Training sessions for new representatives and other senior officers from the field in 1998-1999 have included discussions of the security implications of the year 2000 problem, including the provision of information developed by the Office of the United Nations Security Coordinator;

(i) Security visits to the field during 1998-1999 have highlighted the security risks and actions that can be taken to alleviate the year 2000 problem;

(j) Each UNICEF country office will be asked to report what security-related/continuity of operations actions the United Nations community in the country is taking, as well as what actions the UNICEF office itself is taking;

(k) All UNICEF country offices will have at least one functioning satellite telephone by the fall of 1999, and its functioning will be tested recurrently;

(l) The UNICEF Operations Centre will be on high alert for year 2000-related crises before the end of 1999 and as long into 2000 as necessary.

29. A live simulation exercise was carried out from 29 July to 2 August 1999. During that exercise, all systems were backed up, then systems clocks were reset to 30 December in synchronization with time zones in participating offices around the world. Test users in all locations entered data and simulated intense transactions in test databases from applications to create real case scenarios. The behaviour of each application was captured or repeated during date-related calculations. Then systems were gradually shut down and restored to their normal mode of operation. On the basis of an analysis of data compiled from the test, UNICEF is in a position to affirm that its information technology infrastructure will make a smooth transition into the year 2000.

United Nations Population Fund

30. With a view to preparing the staff of the United Nations Population Fund (UNFPA) for potential year 2000-related problems, an information session has been held to inform them of the nature of the year 2000 issue, its coverage in the media and what UNFPA is doing about it. Additional sessions are planned to keep staff fully informed of the readiness status of the Fund for the year 2000. A circular has been sent out to the field offices informing them of the potential of the year 2000 issue and how they should prepare themselves.

31. With regard to hardware and software, UNFPA has six Sun computers running Solaris software. A special year 2000 diagnostic test provided by the manufacturer was run on each of the servers in order to detect the non-year 2000-compliant elements in the computers. The test identified not only the non-compliant elements and modules but also what patches were necessary to make the computers year 2000-compliant. The process of installing the patches on the computers is ongoing and all the computers were planned to be year 2000-compliant by 15 July 1999. UNFPA also has four Novell servers that are non-compliant and are being decommissioned. Other Novell servers require patches, which were identified and acquired and were scheduled for installation during the first week of July 1999. In addition, UNFPA has some 300 personal computers, which have all been tested for year 2000 compliance. The basic input/output

system (BIOS) on some were found to be non-compliant. All of these computers have been made year 2000-compliant. The major application at UNFPA headquarters, PRMS, was tested and found to be compliant. UNFPA uses Netscape SuiteSpot for its messaging (e-mail), scheduling (calendar functions) and Web service. The modules that are not totally year 2000-compliant are currently being upgraded. UNFPA uses the Siemens Saturn IIe PABX, which has been found not to be year 2000-compliant. UNFPA uses the Octel voice-mail system, which is not year 2000-compliant.

32. A live year 2000 test of UNFPA equipment and major systems was conducted on 15 and 16 July 1999. All systems at headquarters were tested. The systems that were known to be non-compliant were tested to determine the consequence of the non-compliance. The systems that had been identified as compliant were also tested in order to verify and document compliance.

33. All UNFPA field offices have been sent software to enable them to check all personal computers and servers for compliance. Individual country offices are taking steps to rectify their non-compliant situations regarding computer hardware and software. The main UNFPA application in the field offices, UNIFOS, has been successfully tested for year 2000 compliance.

United Nations Relief and Works Agency for Palestine Refugees in the Near East

34. With respect to information technology, the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) has identified all required year 2000 compliance activities and $650,000 has been determined as the cost of implementation. All banks at which UNRWA holds major accounts have confirmed their year 2000 readiness. On-line banking systems used by UNRWA have also been confirmed as being year 2000-compliant.

35. All computer applications in use by UNRWA have now been certified as year 2000-compliant. All equipment containing microprocessors, such as telephone switches, fax machines, photocopiers and elevators, has been either replaced or verified as not being affected by the year 2000 problem.

36. Banks and suppliers have been requested to provide hard-copy statements of accounts. All fuel and water storage facilities will be topped-off at the end of December 1999.

37. Circulars have been issued to all staff alerting them to the year 2000 issue. Members of the security management team are liaising with the designated officials in the UNRWA area of operations with respect to contingency planning in the event of civil unrest and the failure of essential services. Year 2000 teams have been established at all headquarters and field offices in the Agency's area of operations. Team members are required to be present during the rollover period to monitor the situation and handle incidents that may arise.

United Nations Environment Programme and United Nations Centre for Human Settlements

38. The management structure for dealing with the year 2000 problem comprises a steering committee (the Technological Innovations Committee, composed of representatives of the United Nations Office at Nairobi, the United Nations Environment Programme (UNEP) and the United Nations Centre for Human Settlements (Habitat) with knowledge of information technology and a broad base of understanding of the operation of the organizations) which monitors progress and advises senior management on required action and a year 2000 task force dealing with year 2000 compliance and contingency planning. The task force established a five-stage plan of action (awareness, management framework, inventory and assessment, implementation and contingency) addressing the needs of the United Nations Office at Nairobi, UNEP and Habitat, as well as those of their outposted offices. Other United Nations bodies operating in Kenya (particularly UNICEF, UNDP and the World Food Programme (WFP)) have been approached to see where joint action might be taken.

39. While an inventory of all information technology hardware, software, in-house applications and items with embedded microprocessors has been completed for the United Nations Office at Nairobi, UNEP and Habitat at Nairobi, it is still ongoing for outposted offices of UNEP and Habitat. The same applies to the inventory of all external suppliers, as well as of contracts/licences (completed for Nairobi, ongoing for outposted offices). The list of interfaces between internal systems and that between internal and external systems was completed in April 1999. Mission-critical systems were identified at Nairobi on 1 March 1999 and the inventory prioritized. External consultants were engaged and are carrying out software fixes. Letters were sent in March 1999 to the power, telecommunication and banking providers, as well as to hospitals, the Nairobi City Council, the Commissary and the International Air Transport Association.

40. The United Nations Office at Nairobi, UNEP and Habitat standardized on Windows 95 for OS functions, Microsoft 97 for basic office applications and Pegasus 3.1 for electronic mail. The conversion of mission-critical payroll and accounting applications is under way and was to be completed by mid-September 1999. Plans are under way to replace the mission-critical procurement software. About 500 computers were procured to replace existing non-compliant stock and were to be distributed by September 1999. Mission-critical servers have been upgraded to attain year 2000 compliance. Plans are under way to upgrade the LAN, with year 2000-compliant hardware and software. The PABX system is compliant and plans are under way to upgrade the voice mail system to attain compliance.

41. The task force aimed at completing by the end of July an assessment of systems that were likely to be affected because they would not be fixed in time. Contingency plans would then be drawn up and adjusted constantly in the light of monitoring of the actions of the Kenya year 2000 coordination committee and the contingency plans that it is drawing up. In addition, these actions would be coordinated by a special inter-agency task force which came into operation in July 1999.

The Fund of the United Nations International Drug Control Programme

42. The United Nations International Drug Control Programme (UNDCP) reports that all information systems under its responsibility have been made year 2000-compliant. UNDCP began this process in 1993 by re-engineering its information systems and purchasing both new hardware and corporate software packages. Today, its hardware and operating system and the major corporate software packages it operates are guaranteed year 2000-compliant by the vendors.

43. Administration of UNDCP, including computer networks and LAN services (hardware and software components) is the responsibility of the United Nations Office at Vienna.

United Nations Office for Project Services

44. UNOPS has completed the inventory and compliance review of its internal information systems (hardware and software) at headquarters, two decentralized offices and one outpost. Inventories from two decentralized offices and two outposts are awaited. All corporate information systems have been checked and are, where necessary, being rewritten to ensure year 2000 compliance. Year 2000 certification of all UNOPS systems at headquarters, decentralized offices and outposts were to be concluded in October. Year 2000 certification for the Chrysler Building, where UNOPS moved in September, has been ascertained from the Chrysler Building management. With regard to IMIS, United Nations year 2000 certification is awaited.[3]

45. Together with UNDP, UNOPS has prepared a Web-based year 2000 information package to assist UNOPS offices and projects in identifying and mitigating year 2000 risks. The information is distributed via CD-ROMs together with some diagnostic tools and made available via the UNOPS Intranet site.

46. Contingency plans and directions to assist UNOPS offices and projects in mitigating year 2000 risks are currently being prepared. Directives will be given out accordingly and relevant information will be made available on-line and via CD-ROMs.

47. To ensure a due review of its internal year 2000 efforts and to protect the interests of its clients, UNOPS has established a year 2000 advisory group.

World Food Programme

48. WFP is a humanitarian organization engaged principally in complex emergencies. Its primary responsibility is to deliver bulk food to beneficiaries. Many operations require complex logistics. The goal of WFP under a year 2000 perspective is therefore to avoid interruptions in the food pipeline and to safeguard its human and material assets. The approach taken follows the recommendations made by the Economic and Social Council in its resolution 1998/45 of 31 July 1998 (awareness, assessment, solution and contingency planning).

49. WFP recognized the need to avoid potential year 2000 disruptions as early as 1997. It began to review its information technology systems and then its business environment for year 2000 compliance. With operations in over 80 country offices and a similar number of sub-offices, the degree of year 2000 susceptibility varies to a considerable degree. Some environments are better equipped to cope with disruptions, while in others it is believed that the proven ability to deal with frequent shortages will also facilitate the year 2000 transition.

50. The Administrative Sub-Group of WFP, consisting of senior executives and chaired by the Deputy Executive

Director, constituted itself as the Year 2000 Steering Committee. A project document was prepared outlining the objectives, assigning responsibilities and defining an action plan and time schedule. A specifically recruited four-person year 2000 management team, together with 100 regular staff members who function as year 2000 focal points and coordinators in the country offices, regional bureaux and headquarters divisions, assist line management in discharging their year 2000 responsibilities.

51. As of mid-October 1999, some 90 per cent of inventory assessments, 80 per cent of action plans and 70 per cent of contingency plans had been received and were being analysed for issues of regional or corporate concern. Future focus will be on the implementation of contingency plans. Compliance tests of information technology systems are close to completion. The global telecommunications systems is being tested for year 2000 readiness, including satellite telephones, two-way radios and telex facilities.

52. A year 2000 budget has been prepared. Costs arising from action and contingency plans are currently estimated at approximately US$ 1.3 million, plus support costs in the order of US$ 360,000. This does not include the time spent by regular staff on year 2000 issues. Allotments to country offices and headquarters divisions will be made to purchase equipment under delegated authority to ensure year 2000 readiness.

53. As requested by CCAQ at its high-level meeting in March 1999, WFP has taken the lead in coordinating year 2000 logistics preparedness, in particular with the Office of the United Nations High Commissioner for Refugees and UNICEF. Consultations at the field level are under way. Informal discussions have also begun between the respective headquarters to review common concerns. Three working groups have been established with the Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD) to ensure joint preparation and mutual assistance in the areas of infrastructure (including security), finance (including banking) and personnel.

54. WFP staff are regularly informed of year 2000 developments through a monthly year 2000 bulletin. One general staff meeting in September included a year 2000 briefing. Staff are encouraged to take those precautions they deem most appropriate in their individual situations.

55. An emergency team is being established at Headquarters. Members will be on premises or on call during the rollover period to assist country offices and headquarters as well as individual staff members. Similar teams are established in all country offices.

International Computing Centre

56. As a provider of operational information technology services and support to 28 international organizations, ICC has given very high priority to year 2000 compliance.

57. Year 2000 compliance was identified as a key project in 1994 and the necessary work was completed in mid-1999. Several briefings to the ICC Management Committee, Technical User Group and other bodies (e.g. CCAQ(FB), High Level CCAQ and the Information Systems Coordination Committee (ISCC)) have been given.

58. Because of its potential impact on the work of its participating organizations, ICC commissioned an independent review of this project. This was carried out by the Office of Internal Oversight Services during May 1999 and confirmed that the ICC approach to this project was in line with best practices and that the risk of non-compliance was small and driven by products and services from external providers.

59. ICC and its clients have carried out several year 2000 tests of all systems. These tests included the use of the ICC Disaster Recovery plans and facilities as well as several of the individual contingency plans prepared to deal with disruptions to services.

60. The ICC year 2000 Rollover Operating Regime was approved by its Management Committee in September 1999.

III. Action taken by specialized agencies and related organizations

International Labour Organization

61. In order to address potential problems posed by the year 2000 problem, a project on year 2000 compliance in the International Labour Organization (ILO) was organized and staffed over two years ago. The objective of this effort has been to ensure a smooth transition into the year 2000 and to assure that the business of ILO would not be unduly disrupted in early January 2000. The project was aimed at certifying that the computer hardware, software and other equipment containing electronics being used at headquarters, in field offices and in multidisciplinary teams were properly prepared to recognize dates beyond 1999.

62. The project was broken down into 23 sub-projects and the scope included the following elements:

(a) Mainframe, server and desktop computers;

(b) All computer software, including operating systems, packages and applications;

(c) Network-delivered support and Internet components;

(d) Non-computing equipment, such as telephone exchanges and elevators;

(e) Boundary planning;

(f) Contingency planning;

(g) Staff awareness-raising and advisory information.

63. Currently, nine of the sub-projects are completed and certified as compliant, while another nine are nearing completion. Five sub-projects are receiving special management attention. The overall project is presently 92 per cent complete. It is felt that all risks or exposures to mission-critical activities are now under control.

64. This effort has been supervised by a year 2000 steering committee. A contingency committee has also been formed consisting of the major departments of ILO and charged with dealing with issues involving operational continuity and staff welfare in the event of year 2000-related problems or disruptions caused by external influences.

65. ILO regularly publishes year 2000 status and advisory information on its Intranet Web pages for management and staff to access and review. In the coming weeks, official circulars and directives will guide management and staff members throughout the Organization on transition issues, and a public staff meeting will be held to advise and inform the staff on year-end operations and personal considerations.

66. A special trilingual year 2000 "help desk" will be set-up and staffed 24 hours per day during a "boundary" period from mid-December through early January to respond to concerns, questions or problems of staff members at headquarters in Geneva or the worldwide field offices network.

Food and Agriculture Organization of the United Nations

67. Work on the year 2000 problem in the Food and Agriculture Organization of the United Nations (FAO) started in June 1997 with an assessment of all information technology assets at headquarters and in the decentralized offices in order to identify non-compliant items and develop an appropriate corrective plan. To date, all non-compliant hardware and software have been replaced and 89 per cent of all non-compliant applications have been corrected. Work on the remaining applications is expected to be completed by the year-end deadline.

68. Work started in mid-June on the resolution of new compliance issues identified by Microsoft and other software vendors in the first half of 1999 and patches are currently being applied to the affected software products. Despite the late identification of these problems, the corrections are expected to be completed by the end of the year.

69. In addition to the work aimed at ensuring that the FAO information technology infrastructure and systems will continue to operate correctly in the year 2000 and beyond, the year 2000 project has also run an awareness campaign to alert FAO member countries to the possible problems which the millennium bug could create for agriculture and the food sector. In this context, a brochure entitled *Food, Agriculture and the Millennium Bug* has been widely distributed and also posted on the FAO Web site.

70. An internal awareness campaign has also been conducted to inform staff members on year 2000 activities that directly affect them and their workstations. An Intranet Web site has been created for this purpose, with some information pages dedicated to the personal preparedness of staff members and their families.

71. A year-end plan is currently being finalized. The aim of the plan is to avoid or minimize rollover problems, especially transient problems or problems which, if not immediately corrected, could cause damage to people or property. The plan foresees either a "quiet-down" and/or a shutdown of the FAO infrastructure around midnight of 31 December.

72. The year 2000 project has been cooperating with other United Nations agencies in an effort to share information, exchange material and review current and best practices. In particular, close cooperation is taking place with the other Rome-based agencies. This has led to the creation of three joint working groups (FAO, WFP and IFAD) with responsibility for finance and budget issues, staff welfare issues and infrastructure issues.

United Nations Educational, Scientific and Cultural Organization

73. In the United Nations Educational, Scientific and Cultural Organization (UNESCO), the preparatory work for solving the year 2000 problem in its various systems has progressed according to schedule. Progress reports have been made to Member States at each session of the

governing bodies. The work has been focused on mission-critical systems: main computing systems, including finance, budget, human resources and payroll, network servers and applications, and microcomputers. Moreover, considerable attention has also been devoted to other important systems and services related to the day-to-day operation of UNESCO such as power, telephone services and air conditioning. Special care has been taken regarding field offices, where the preparation is being conducted in close cooperation with other United Nations agencies present in each location.

74. In view of the results already achieved and the ongoing activities, the work is expected to be finished on time. Contingency plans have been drawn up to cope with problems that may arise owing to the complexity of the matter and to external variables beyond the control of UNESCO.

75. In addition, a significant amount of information has been made publicly available through the UNESCO Web site in order to raise Member States' awareness of the year 2000 problem and to help them analyse and avoid possible problems.

International Civil Aviation Organization

76. Within the secretariat of the International Civil Aviation Organization (ICAO) efforts commenced some time ago to ensure that in-house systems were already compliant, or, if not, were made compliant. The project has proceeded on time and within its budget. Only a few items of work remain to be done, with final completion fully expected by early December 1999.

77. For the worldwide regional offices of ICAO, compliance has also been confirmed.

78. Regarding awareness of year 2000 issues with its Contracting States, ICAO developed a comprehensive action plan to address the year 2000 problem. Main efforts have centred on making information available, raising awareness, assessing progress and assisting States to develop contingency plans. Full details and an executive summary regarding this are available at http://www.icao.int/y2k on the World Wide Web.

World Health Organization

79. In 1997, the Computer Oversight Committee of the World Health Organization (WHO) reviewed the year 2000 issue and set forth guidelines with a view to:

(a) Alerting staff and raising their awareness;

(b) Providing information about the nature and extent of the problem;

(c) Providing guidance on how to deal with the problem.

In 1998, the Committee issued an assessment guide for information technology and other managers.

80. WHO has been working since 1997 on its corporate or central systems, progressively rendering them year 2000 compliant. Through the above guidelines and assessment guide, it has also informed managers of the precautions they need to take with individual or legacy systems that they could be running and has suggested corrective action. WHO has either successfully run or will be running very shortly final tests on corporate systems to ensure compliance. Some of the major WHO systems are run through the ICC, which has taken the necessary action on this matter.

81. In the area of procurement, all purchase authorizations issued since 1997 carry a provision that the suppliers' goods must be year 2000 compliant. As regards building infrastructure, WHO has obtained or is in the process of obtaining certification from suppliers on certain critical elements, such as elevators and security systems.

International Monetary Fund

82. Internally, year 2000 compliance testing of major information technology systems at the International Monetary Fund (IMF) and headquarters buildings and associated facilities is complete, as is certification of the microcomputer and network infrastructure. Work on smaller systems is either finished or scheduled for completion by the end of November 1999. IMF has also developed an inventory of all end-user applications/systems not under the purview of the centralized Bureau of Information Technology Services. Of the 122 systems in use, none feeds into the institution's mission-critical systems. Twenty-eight of the systems/applications were seen as important or very important to the day-to-day work of the end users and, of these, only four remain to be certified as year 2000 compliant by the relevant vendors. For any that have not been certified as compliant by 1 November 1999, a contingency plan must be supplied to the IMF year 2000 project manager.

83. Resident Representative posts and overseas offices are in the process of being upgraded with new workstations and, where relevant, new servers. The last of these upgrades will

be installed in November. In addition, on the basis of assessments of risk in those countries where posts and offices are located, generators and satellite telephones are being selectively shipped.

84. With respect to travel around the end of the year, the Technology and General Services Department is circulating desk-to-desk the latest travel advisories from the United Nations Security Coordinator. While not prohibiting travel during the relevant period, the advisory is meant to make travellers aware of the possibility of disruption in a range of essential services and encourages them to take personal responsibility for being prepared for such disruptions.

85. In its relations with Member States, IMF has established a temporary facility to enable it to extend short-term financing to countries that encounter balance-of-payments difficulties arising from loss of confidence or other problems associated with potential or actual year 2000-related failures of computer systems. The year 2000 facility went into effect on 15 October 1999 and will expire on 31 March 2000. The establishment of this facility resulted from an effort, in collaboration with World Bank personnel, to assess the potential economic implications of IMF Members' year 2000 readiness or lack thereof.

International Telecommunication Union

86. Global telecommunications rely upon a seamless interconnection of various domestic and international operating agencies and carriers. The international dimensions of the year 2000 problem are significant and pose a considerable challenge. In March 1998, the International Telecommunication Union-Telecommunication Standardization Sector (ITU-T) Study Group 2 established a year 2000 task force. The task force had the objective of raising awareness of the year 2000 problem and associated issues with telecommunication operators, providing practical advice and support, ensuring cross-fertilization of year 2000 best practices among the operators and understanding the compliance position of different operators.

87. Subsequently, the World Telecommunication Development Conference (Valletta, 1998) placed the matter on the agenda of the ITU Telecommunication Development Bureau as an issue to be addressed on an urgent basis by providing developing countries with technical assistance. The ITU year 2000 activities are carried out in collaboration with the participants of the members of the task force, different sectors of ITU, suppliers and other international organizations, such as UNDP and the World Bank and regional telecommunication organizations.

88. Lack of awareness of the year 2000 problem is a major obstacle to action and must be overcome in order to enable telecommunication operators to initiate projects and, if necessary, take advantage of funding available internationally. A significant part of ITU activity has focused on outreach and the development and implementation of year 2000 programmes among telecommunication operators. Towards this end, project management tool kits and guides on testing practices and business continuity were developed and widely disseminated. A series of workshops, specifically tailored to particular issues and interests in each region were held around the globe, bringing together operators, manufacturers and specialists in testing and contingency planning.

89. The ITU year 2000 Web site (http://www.itu.int/y2k) is a major vehicle for exchange of information including the compliance position of operators. To date, ITU has received 570 responses to a compliance questionnaire representing approximately 480 carriers from 160 countries. The summary results of the questionnaire are available on the public section of the ITU Web site, while the full questionnaire results are available through the site's closed user group. This is the only source of data providing a summary of the overall year 2000 position of telecom operators which is in the public domain. As such, this is referenced extensively by operators, many customer groups and year 2000 sector bodies. A closed user group restricted to operators contains full questionnaire details with the possibility of electronically updating detailed testing reports. In the first half of 1999, the Web site received an average of 140,000 hits per month.

90. As a way to build confidence in the integrity of the global telecommunications network, ITU has facilitated extensive international inter-carrier interoperability tests. The purpose of these tests is to verify that telecommunications crossing international gateways during the century date change (and a few other dates) would be completed successfully without an adverse effect on the network. A large number of operators from all regions were involved in these tests, which were conducted successfully on 35 switch types from eight manufacturers. An encouraging aspect of the tests has been that no year 2000 anomalies were found.

91. The telecommunications community is confident that no major disruption to telecommunications will occur as a result of the year 2000 issue. Most major operators have completed their equipment upgrades and are now in the business continuity planning stage. Difficulties remain, however, in the case of developing countries and transition economies and ITU has been focusing on these countries to

advise and assist operators in those countries to achieve as much as possible in the time remaining. Requests from some 30 countries for expert assistance in managing their year 2000 programmes have been met. These were short expert missions to assist developing countries in managing their year 2000 programmes, conduct readiness assessments and advise on testing and contingency planning. To assist those countries further, training programmes have been held on testing and contingency planning.

92. ITU is in the process of establishing an early warning system to take advantage of differing time zones. The objective is to monitor the position through each of the 24 time zones, using a "follow the sun" approach. Telecom operators participating in the system are to report either positive findings or anomalies 30 minutes after midnight following the century date change and at noon on the first working day. Information from the Asia-Pacific region (where, within a 6- to 8-hour window, 90 per cent of all switch types and 90 per cent of all transmission equipment are in operation) would provide other countries with warning to implement counter measures.

Universal Postal Union

93. In December 1998, the International Bureau of the Universal Postal Union (UPU) created an ad hoc task force for the management of the year 2000 issue. The task force, chaired by the Deputy Director-General of UPU, has been meeting regularly since January 1999 to monitor the progress of the work to prepare for the change of date on 1 January.

94. The task force has divided its activities into two parts: on the one hand, the internal activities necessary to ensure the readiness of the International Bureau and the smooth functioning of all its essential systems during the year-end transition and, on the other hand, the external activities directed towards the postal administrations that are members of UPU.

95. The scope of the internal activities comprises the following: creating inventories of all computerized systems and applications, as well as embedded systems; prioritizing the computerized applications, verifying the systems and applications in descending order of priority, making adjustments where necessary, obtaining statements of year 2000 compliance from suppliers of equipment with embedded systems; and developing contingency measures for critical systems. The majority of these activities are completed and the remainder are planned for completion by the end of November 1999.

96. As part of the external activities, questionnaires were sent to all member postal administrations asking for information about their level of preparedness in relation to the year 2000 issues. The replies to the questionnaires have been entered into a Web site database that can be consulted by the UPU members. Targeted assistance projects have been developed for administrations that have specifically requested help from UPU.

97. The task force has also monitored the information provided by other United Nations agencies and by the ISCC on the year 2000 issue, and it has replied to numerous requests for information about the preparedness of the postal world for 2000.

98. UPU estimates that it has addressed the year 2000 issue in a serious and complete fashion, and that it has done and plans to keep doing its utmost to ensure the smoothest possible transition to the new millennium, for itself as well as for its members, the postal administrations.

International Maritime Organization

99. Over the past year, the International Maritime Organization (IMO) has devoted time and resources to proper planning, analysis, procurement, replacement and modification of information technology systems that were not year 2000 compliant as follows:

(a) Information technology Infrastructure: IMO has replaced all personal computers and file servers that were not year 2000 compliant with newer and year 2000 compliant models. The local area network switches and intelligent hubs are being tested for year 2000 compliance;

(b) Software: the network operating systems have been upgraded to year 2000 compliant versions. Approximately 95 per cent of the special purpose applications running on the servers have been converted or modified and also tested for year 2000 compliance. The remaining 5 per cent are currently under review. General-purpose applications have been upgraded to newer and year 2000 compliant versions. On the workstations, all personal computer operating systems, general-purpose applications and software clients have been upgraded.

100. In addition to the millennium rollover dates, namely, 9 September 1999, 1 January 2000, 29 February 2000 and 1 January 2001, the maritime community had to be made aware of the issue relating to the Global Positioning System (GPS) end-of-week rollover problem, on 21 and 22 August 1999, concerning the aids to navigation used by merchant ships. Presentations were made at conferences and seminars

(Singapore, Piracus, Greece, and Abu Dhabi) in order to increase the maritime sector's awareness of the year 2000 problem.

101. IMO issued a first warning on the year 2000 problem through a circular, MSC/Circ.804, dated 9 June 1997. This was followed by circulars MSC/Circ.868 of 27 May 1998 and MSC/Circ.894 of 17 December 1998. The information circulated aimed at describing the problem and identifying a course of action to prepare the coastal States, ships and crew to face potential disruptions. Emphasis was also placed on the need to exchange as much information as possible on this matter. IMO promoted the circulation of local notices to mariners on the information to be provided by ships on their readiness, and supported the development of the exchange of information on the Internet (www.ship2000.com).

102. As a follow-up to a specific meeting on year 2000 problems held at IMO headquarters and co-hosted by the United States Coast Guard and the United Kingdom Maritime and Coast Guard Agency, IMO prepared a Code of Good Practice (Circular letter No. 2121, annex 1, dated 5 March 1999). The purpose of this document was to provide information on year 2000 contingency plans and recommended precautions, as well as three questionnaires to be used by shipping companies, ships and ports/terminals when ascertaining their mutual preparedness for year 2000 incidents. The expected outcome of the Code is to avoid disruptions in the globally critical maritime transportation system, prevent refusal of access to ports/terminals and minimize the threat to maritime safety and the marine environment.

103. Following a workshop on maritime year 2000 contingency planning exercises on 21 September 1999 in Berlin, IMO issued Circular letter No. 2158, dated 24 September 1999, which encourages administrations to consider conducting year 2000 contingency exercises and provides guidelines on contingency planning and activities to deal with possible year 2000-related disruptions.

104. Finally, IMO will set up an internal watch system to be implemented during the rollover period in order to assist the maritime community and provide the information contained in the different circulars and circular letters upon request.

World Intellectual Property Organization

105. The World Intellectual Property Organization (WIPO) has given high priority to the year 2000 project. This project is coordinated and monitored on a weekly basis following industry best practices. WIPO mission-critical applications have been successfully tested twice for year 2000 preparedness. WIPO network infrastructure and desktop software have also been upgraded according to the planned schedule. All testing is carried out using separate year 2000 test environments. System development activities are frozen for mission-critical systems until the completion of the year 2000 project.

106. Currently WIPO year 2000 project is in its final phase where all activities are being consolidated and the focus is on the preparation of contingency plans and the rollover plan. A year 2000 command post is being planned to be operational starting from the rollover period to handle incidents related to the year 2000 problem.

107. WIPO year 2000 preparedness information is also available on the WIPO Web site at http://www.wipo.int.

International Fund for Agricultural Development

108. The International Fund for Agricultural Development (IFAD) has established a comprehensive programme to ensure the smooth transition of its operations into the new millennium. The preparatory phase of the programme is being completed and IFAD is now readying itself to deal with potential emergencies. Attention has also been paid to raising the awareness of IFAD staff to such eventualities. In this connection, IFAD is cooperating with the Rome-based United Nations agencies in order to ensure, to the extent possible, that a consistent approach is followed.

109. Under the leadership of the Vice President of IFAD, the above-mentioned programme was launched in the latter part of 1998 and was designed to address three main lines of intervention.

110. The vulnerability of IFAD to year 2000 problems was assessed and the business impact of possible non-compliant components was evaluated. The exposure that IFAD faces is due to components, computer systems and other equipment that contain computer chips, and to partners that may not be compliant.

111. Inventories and analyses of internal components have been made. Although many vendors are claiming compliance status, most are publishing disclaimers to indicate that their status of compliance should not be considered as binding and that they cannot be held responsible for errors in their products.

112. A list has been drawn up of the areas of IFAD business most at risk due to internal components or external entities. An analysis has been made of the impact of internal components and external partners' compliance, and priorities have been assigned. This phase was completed in March 1999.

113. Action has been taken to correct IFAD internal systems identified as non-compliant, according to the priorities established by the risk assessment and the feasibility of corrective action. Examples are:

(a) Network infrastructure: operating systems, active cabling systems;

(b) Standard software: Microsoft Office Suite, messaging system;

(c) Specialized software: software used in Treasury (SWIFT, Bloomberg, State Street);

(d) Corporate database and applications;

(e) Conversion of the personnel payroll system;

(f) Corporate applications transferred to a compliant platform;

(g) Network servers.

114. The following are expected to be completed in early November:

(a) Proprietary fund transfer system;

(b) Financial information system.

115. Wherever possible, IFAD has tested the compliance of systems with a critical business impact in simulated year 2000 environments. Several dates in 1999 and in 2000 were simulated, particularly the most critical ones, such as 9 September 1999, 1 January 2000, 28 and 29 February 2000 and 1 March 2000. Information technology components were tested using special software.

116. With respect to external entities, IFAD cannot be held responsible for its year 2000 compliance. However, it has contacted its main business partners to enquire of their status of compliance, compiled the responses received and, in some instances, defined alternative ways of performing functions that are dependent on external entities.

117. In this regard, IFAD took a number of protective and proactive measures, such as the following:

(a) Equipment contracted in 1999 was certified compliant by the vendors or a compliance clause was included in the contracts;

(b) A "banking instruction" clause was introduced in consultants' contracts, requesting confirmation of their banking instructions and disclaiming IFAD liability in the event the consultants' banks were not compliant;

(c) Contacts were established with the Fund's main partners, such as banks, to ensure their compliance.

118. In addition, IFAD has joined the efforts of other international organizations to promote awareness among partners in the developing countries. In particular, IFAD joined a Rome-based year 2000 inter-agency group and participated actively in actions taken with common suppliers of main services, such as utilities or banking. IFAD has also joined an inter-agency coordination group, comprising representatives of FAO, IFAD and WFP. The group was created in May 1999 for the purpose of ensuring that, whenever possible, a common policy would be pursued. IFAD is actively participating in the three working groups dealing with infrastructure and communications, finance and budget, and staff issues.

119. Despite the above-mentioned initiatives, it is possible that problems may arise and have a negative impact on sensitive areas of the business of IFAD. To minimize any such impact, adequate contingency measures are being developed by the IFAD year 2000 task force and the relevant organizational units. Teams are being trained and are preparing to implement one or several of these measures in the event the task force calls for a contingency plan because of an emergency or other problem that cannot be resolved otherwise. Contingencies are defined from a business perspective by the divisions responsible for performing the most critical IFAD functions, regardless of the status of compliance of the tool/system used for such functions.

120. IFAD is reporting periodically to its Executive Board on its year 2000 status of preparedness. The year 2000 task force is looking forward to the final report on the status of the United Nations system at large.

United Nations Industrial Development Organization

121. The Building Management Service of the United Nations Industrial Development Organization (UNIDO) started its year 2000 vendor compliance confirmation project for systems and equipment at the Vienna International Centre in February 1999. The project is almost complete: out of 187 confirmation items, only 4 are still pending; negative replies were received for only 3 pieces of equipment, but these are not critical for the operations of the Vienna

International Centre. The project includes compliance confirmation from the Vienna International Centre's utility provider (IAKW) for electricity, water, heating, cooling and gas. The IAKW subcontractors do not expect a major supply breakdown for the Vienna area.

122. With respect to electricity, the most critical utility, a European-wide problem at year-end, will also affect Austria. In such a case, a total power cut of up to four hours must be expected for high-priority users (such as hospitals, government buildings, the Vienna International Centre and the Austria Centre).

123. In the case of a public power cut, the fuel tank capacity of the emergency power generators in the Vienna International Centre allows continuous operation for 24 hours. However, only the lights in corridors, the fire brigade freight elevators and dedicated systems will be supplied with emergency power owing to the limited generator power capacity. The battery capacity of the uninterruptible power source for the communications installations at the Vienna International Centre, namely, telephone, United Nations-network and main fax facilities, guarantees operation for eight hours.

124. The Building Management Service has taken appropriate actions to ensure that necessary hardware and/or software upgrades for their systems/equipment are implemented by November at the latest. A Building Management Service year 2000 readiness checklist and action plan, which includes emergency staff for year-end coverage, has also been prepared. The Building Management Service is continuously testing its systems and equipment according to this plan, also during the holiday period from 1 to 3 January 2000, to ensure smooth operation of the Vienna International Centre on the first official working day of 4 January 2000.

125. In the area of computer operations, UNIDO started to look into the year 2000 problem in 1997, particularly with respect to the area of mainframe applications. Today, with few exceptions, all mainframe applications are fully year 2000 compliant. The network and its components are also compliant. Other hardware and software elements are being reviewed again, but are not expected to cause a year 2000 problem.

International Atomic Energy Agency

126. To address the year 2000 problem, the International Atomic Energy Agency (IAEA) completed in October 1998 an action plan containing measures for dealing with potential difficulties in its own operations during the transition to the year 2000, as well as for possible assistance to member States in this regard. The action plan was developed following the adoption by the General Conference of IAEA, on 25 September 1998, of a resolution on measures to address the year 2000 issue (see document GC(42)/Res/11). The General Conference urged Member States "to share information with the Secretariat regarding diagnostic and corrective actions being planned or implemented by operating and regulatory organizations at their nuclear power plants, fuel cycle and/or medical facilities which use radioactive materials to make those facilities Year 2000 ready". The General Conference encouraged the Secretariat, "within existing resources, to act as a clearing house and central point of contact for Member States to exchange information regarding diagnostic and remediation actions being taken at nuclear power plants, fuel cycle and/or medical facilities which use radioactive materials to make these facilities Year 2000 ready".

127. The IAEA internal information technology infrastructure, consisting of system software, networks, hardware and standard software platforms and related instrumentation, have been checked and, where necessary, revised to ensure year 2000 readiness. An agency-wide year 2000 task force composed of representatives of all departments was established to discuss the verification and conversion work for year 2000 compliance of all computing platforms and to provide guidance to all systems development staff and users. One of the first tasks carried out was the identification of the critical systems, meaning those systems the normal operation of which is essential to the Agency's work and objectives. A number of Agency hardware and software infrastructure components, such as the central computing environment, finance and procurement information systems, have been categorized as critical. In any event, all components of the IAEA information technology infrastructure, critical and otherwise, have now been tested or converted to be year 2000 compliant.

128. IAEA has been in contact for some time with major vendors and suppliers providing products and services to the Agency in order to determine what upgrades or alterations are needed to make these products year 2000 compliant. Concerning the equipment to be provided by the Agency to developing member States in the framework of technical cooperation projects, as of June 1998 all purchase orders require the contractor to certify that all goods delivered will accurately process dates and times for the twentieth and twenty-first centuries, including leap-year calculations, when used in accordance with the product documentation provided by the contractor. It is the responsibility of member States

to ensure that all equipment already in their possession, including equipment obtained through the Agency's technical cooperation programme, is year 2000 compliant.

129. The development of a contingency plan before and after the millennium crossover has just been completed. The Agency intends to carry out in October 1999 a simulation exercise to test the year-end transition of all critical applications and information technology components.

130. Through the Agency's WorldAtom Internet site, IAEA, in mid-February 1999, established a series of Web pages in order to coordinate the global exchange of information on the Agency's year 2000 activities and related topics. The site (http://www.iaea.org/worldatom/program/y2k) is designed as a one-stop directory for information about year 2000 activities in the Agency, its Member States and international organizations within and outside the United Nations system. The site covers four broad categories: documents and reports; information about Agency activities related to nuclear safety, radioactive waste management, medical facilities, safeguards and internal computer systems; current news and viewpoints of experts; and links to other year 2000 Internet information resources, including sites in more than 20 member States. In addition, the site features access to an extensive range of additional information about activities for the Agency and its member States.

131. An interactive feature of the year 2000 pages is an on-line news group through which interested scientists, government officials, journalists and members of the public can exchange information by electronic mail. There are about 100 participants in the news group, including energy journalists and government and industry officials.

132. The Agency's obligation under the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency are implemented through its Emergency Response Centre, which maintains the Agency's Emergency Response Plan and associated procedures and checklists, and conducts appropriate training and exercises. This plan, which was thoroughly reviewed and overhauled in 1999, forms the basis of the Agency's anticipated response to the year 2000 problem. The existing information exchange system between the Emergency Response Centre and member States relies primarily on conventional and dedicated communications lines (telephone and facsimile). Computer-related aspects, such as contact point databases and assessment codes, have been guaranteed to be year 2000 compliant, and paper backups already exist. The most serious problems would occur if the conventional communications lines (telephone and facsimile) were to fail. Backup fax carriers that are already year 2000 compliant have been engaged. Moreover, the use of other means of communication (through computer networks or satellite links) as a backup system is being actively explored. Contingency protocols for exchanging information are being drawn up for contact points under the two Conventions. A newsletter is circulated twice a year concerning emergency arrangements; the August 1999 edition specifically addressed the contingency plans in place and the expectations of States Parties to the Conventions.

133. IAEA assistance to member States in addressing the year 2000 issues has concerned:

(a) The development of guidance documents;

(b) The exchange of information and experience with and between member States;

(c) Services to member States.

It has dealt with the potential impact of the year 2000 problem on nuclear power plants, research reactors, radioactive waste management facilities, fuel cycle facilities and medical facilities which use radiation generators and radioactive materials.

134. IAEA developed guidance documents on ways and measures to address the year 2000 issue in nuclear facilities and achieve year 2000 readiness. They are all available on the Agency's WorldAtom year 2000 Internet site. Questionnaires on actions being taken by national organizations to address the year 2000 issues and on the status of their year 2000 readiness were sent to operating and regulatory authorities in member States. The responses to these questionnaires constituted the basis for information sharing among member States.

135. IAEA organized three international workshops in Vienna in June and July 1999: one on the year 2000 issue at nuclear power plants, another on the year 2000 issue at radioactive waste management and fuel cycle facilities, and a third on year 2000 issues at medical facilities which use radiation generators and radioactive materials. The purpose of these international workshops was to exchange information and experience on assessments carried out and remedial measures taken by the nuclear regulatory authorities and facility operators. Contingency planning was one of the key topics addressed by the workshops, in addition to the inventorization, prioritization and testing of year 2000 susceptible equipment.

136. IAEA has designed an assistance programme consisting of missions to specific nuclear power plants and research reactor sites to assist the operators in setting up and implementing an organized year 2000 readiness programme

in accordance with the guidance document developed by the Agency. The objective is to help in developing a facility inventory and databases that can be shared by participants in the programme. Together with plant managers and staff, teams of experts assess and review plant equipment, process computers and information technology systems for year 2000 compliance. Internationally recognized year 2000 experts and observers from countries with similar facilities take part in the missions. The activities of the teams are coordinated with those of teams set up by the United States Department of Energy and by certain utilities that have cooperation agreements with the utilities requesting such missions. In addition, the secretariat reached agreement with the World Association of Nuclear Operators, the International Union of Producers and Distributors of Electrical Energy and the Commission of the European Communities on all matters relating to the conduct of the missions, particularly the reference guidance documents, the team structure and composition, task description, report format and financial support. Several missions were conducted by IAEA to nuclear power plants in central and eastern Europe, Asia and Latin America.

IV. Steps taken with Member States to resolve the year 2000 problem

137. In its resolution 52/233, the General Assembly called upon the Economic and Social Council to prepare at its substantive session of 1998 guidelines on which Member States would be able to draw in addressing the diverse aspects of the year 2000 problem. To facilitate the work of the Council, the Task Force of the Working Group on Informatics drafted guidelines summarizing best practices for assessing and solving year 2000 problems and for establishing contingency plans at the national and international levels. The guidelines were circulated as a document of the Council (E/1998/85, annex).

138. The Working Group, after reviewing the year 2000 compliance situation around the world, determined that a meeting of national year 2000 coordinators at United Nations Headquarters would greatly benefit Member States. The joint efforts of the Working Group, the Information Technology Services Division and other United Nations offices, combined with the financial support of the World Bank, made it possible for representatives of more than 120 countries to attend a one-day meeting on 11 December 1998. Also attending the meeting were year 2000 experts from the United Nations, the World Bank, the International Telecommunication Union, the International Atomic Energy Agency, the International Civil Aviation Organization and the Joint Year 2000 Council, as well as permanent representatives of missions to the United Nations.

139. The meeting, which was addressed by the Secretary-General, included expert sectoral reports on: banking and finance; telecommunications; nuclear power; oil and gas; shipping and ports; and aviation. An exchange of national experiences and viewpoints on contingency planning and crisis management, followed by a discussion of international strategy, concluded the meeting.

140. One key result of the meeting was the heightened awareness that a regional as well as national and global approaches should be adopted to address the issues. This understanding led to the formation of regional groups and resulted in the Asian Group organizing regional meetings and the South American Group doing the same under the aegis of the Southern Cone Common Market (MERCOSUR).

141. A special page on the United Nations Web site (www.un.org/members/yr2000) was established in 1998 to provide information on the year 2000 issue and is updated regularly. Background material related to the above-mentioned meeting and a list of all national year 2000 coordinators has been posted on this site. Independently, UNDP continues to provide on its Resources Knowledge Web site a separate and extensive section on the year 2000 problem and its relevance for and impact on developing countries.

142. As a result of the first meeting of national year 2000 coordinators, the International Y2K Cooperation Center was established and during the following months about two dozen regional, subregional and sectoral meetings were held to identify what still needed to be done. To follow up on these activities and to assess the current status of international preparedness, the United Nations Working Group on Informatics, in collaboration with the International Y2K Cooperation Center, organized a second meeting of national year 2000 coordinators at United Nations Headquarters in June 1999. Coordinators from 170 countries participated in the meeting.

143. Seven regional groups covering Asia, Central America and the Caribbean, Eastern Europe and Central Asia, the Middle East and North Africa, South America, sub-Saharan Africa and Western Europe met the day before the meeting in closed preparatory sessions to review regional, national and community preparedness. The results of these "breakout" meetings were discussed in the plenary session, which was followed by two panel sessions. Panellists for the first session, on public information and public confidence, concentrated on the issues of public perceptions and the role

of the media. Speakers agreed that an informed public was a less frightened public and that open discussions of the problem would be very useful. The second session, on disaster preparedness and event management, stressed the importance of disclosing information on preparedness and the credibility of governmental plans for handling possible emergencies. Similar to natural disasters, damage resulting from the millennium bug could to a large extent be forestalled. The keys were anticipation, preparation, prevention of panic and responsiveness to emerging problems.

144. Summarizing the results of the meeting, the Chairman of the Working Group on Informatics noted that there had been general agreement that achieving full year 2000 compliance might not be possible by 31 December 1999. Member States should therefore establish contingency plans for all systems and activities of national importance to handle potential year 2000-related disruptions. There had also been general agreement on a number of additional steps to be taken, including the sharing of experiences with other countries and supporting the use of standardized and coordinated public status reports.

145. In her closing remarks, the Deputy Secretary-General noted that fear of the year 2000 problem is also a problem which could cause a secondary crisis resulting in financial panics and mass hoarding of goods. There was a need to build real public confidence about the actions taken to minimize and resolve problems.

Notes

[1] The International Trade Centre UNCTAD/WTO (ITC), the United Nations University (UNU), the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), the United Nations Environment Programme (UNEP), the United Nations Centre for Human Settlements Foundation (Habitat), the Fund of the United Nations International Drug Control Programme (UNDCP) and the United Nations Office for Project Services (UNOPS).

[2] See para. 8 above.

[3] See para. 8 above.